

## INTERNATIONAL SEARCH REPORT

PCT/GB2004/004731

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/48 C12N15/52 C12N15/63 C07K16/18 A61K38/16  
C30B7/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N A61K C30B C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BAJZAR LASZLO ET AL: "The profibrinolytic effect of activated protein C in clots formed from plasma is TAFI-dependent" BLOOD, vol. 88, no. 6, 1996, pages 2093-2100, XP002312988 ISSN: 0006-4971 the whole document ----- -/-	21

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

11 January 2005

Date of mailing of the international search report

02.04.2005

## Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

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## C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SCHNEIDER MARK ET AL: "Two naturally occurring variants of TAFI (Thr-325 and Ile-325) differ substantially with respect to thermal stability and antifibrinolytic activity of the enzyme"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 277, no. 2, 11 January 2002 (2002-01-11), pages 1021-1030, XP002215276 ISSN: 0021-9258 cited in the application abstract page 1024</p> <p>-----</p>	1-3, 6-10, 15-30, 32
A	<p>WANG WEI ET AL: "Carboxypeptidase U, a plasma carboxypeptidase with high affinity for plasminogen"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 269, no. 22, 1994, pages 15937-15944, XP002312989 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1-3, 6-10, 15-30, 32
A	<p>WO 02/099098 A (AMERICAN DIAGNOSTICA INC) 12 December 2002 (2002-12-12) cited in the application page 3, lines 22-25</p> <p>-----</p>	1-3, 6-10, 15-30, 32

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2004/004731

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 23, 24, 27 and 28 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  

1-3, 6-10, 15-30 and 32 (all partially)

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-3, 6-10, 15-30 and 32 (all partially)

A carboxypeptidase U (CPU) mutant polypeptide having greater thermal stability than the enzyme according to SEQ ID NO:2, which mutant comprises a substitution at amino acid residue position 166 of SEQ ID NO:2, and subject-matter relating thereto.

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Inventions 2-37: claims 1-30 and 32 (all partially)

Idem as subject 1 but limited to a substitution at positions 204, 219, 230, 251, 315 or from within 327 to 357, respectively. Invention 2 is limited to subject-matter relating to a substitution at position 204, invention 37 to a substitution at position 357. For efficiency reasons the 37 inventions and their respective claims have not been listed individually. Claim 5, for instance belongs to inventions 7, 35 and 37 (partially).

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Invention 38: claim 31

A method of producing wild-type CPU or proCPU crystals comprising the use an Fab fragment directed to all or part of amino acids from positions 327 to 357 of SEQ ID NO:2.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/GB2004/004731

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 02099098	A	12-12-2002	EP 1383885 A1	28-01-2004
			WO 02099098 A1	12-12-2002
			US 2002177560 A1	28-11-2002
			US 2005032703 A1	10-02-2005